March 16, 1954

Dr. A. M. Pappenheimer, Jr. Department of Microbiology New York University College of Medicine 477 First Avenue New York 16, N.Y.

My dear Pappenheimer:

Thank you for your letter of March 10 which has clarified many of my questions concerning your paper on the diphtheria story. I am sorry that there is not a more explicit statement in the literature on the absolute correlation of lysogenization and conversion. The result that you quoted, that all of the colonies which proved nontoxic in rabbits proved to be still sensitive, would be an entirely satisfactory documentation on this point. I hope that Barksdale will have some comment on this point that I may be able to use as a quotable reference.

I do not think that the isolation of the new, non-converting phage has very much bearing on the mechanism of conversion. I would have been quite astonished indeed if every phage had proved to have such an effect. It least in my inquiry regarding the possible relationship of this conversion to transduction, the "absolute correlation" had to be considered within the context of a converting system.

Yours sincerely,

Joshua Lederberg

JL:mg